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AN INTRODUCTORY ADDRESS TO THE STUDENTS OF THE MEDICO-CHIRURGICAL COLLEGE *

BY L. WEBSTER FOX, M. D.

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A Senator quite famed for his eloquence, asked a brother Senator, who sat beside him during an introductory debate in Congress, to stop and hear him speak. The friend replied: "If you are going to make a speech I would be very glad to listen to it, but if you are going to read one of your infernal compositions I do not propose to stay." By a dispensation of your faculty I have been obliged to trespass upon your indulgence this evening, and ask you not to leave the room before my composition is read.

This day marks an epoch in our lives. You have launched your canoe on a stream full of hidden rocks; many snags, much disappointment, and no few hardships will overtake you before you arrive at the great ocean of your professional life, which as yet hides from you those worlds you intend to conquer. You do not here leave behind you your student life—you have only shunted to another track; you now only concentrate your studies to a more definite purpose. You have elected to master the subtleties of a noble profession, and an inestimable service lures you toward its mastery. You have no doubt decided upon this avocation only after the most careful consideration and thought. Your friends trust you, and we trust you; see therefore to it that you neither disappoint yourselves nor us.

No profession demands more from her students than medicine. She is a jealous mistress. The midnight oil must be consumed; untiring and unceasing your efforts must be made before you can become proficient in your art. The late Sir Andrew Clark, in an address to a class of medical students, said, "Labor is the life of life. Nature will let no man overwork himself unless he play her false."

The majority of you come from the rural districts, all endowed with strong constitutions, clear heads, and good nerve-force. See to it that you do not play your natures false. You will be surrounded by the glitter and glamour of city temptations—fascinating and pleasant as the Luralei's glance. Some of you may become easy victims to the sorceress. Leave her and turn aside, and stick to your calling. Remember, as Dickens has said, "It is well for a man to respect his own vocation, whatever it is." You have more to do than simply to respect your calling. Remember, that in joining the ranks of the students of the Medico-Chirurgical College, you must respect them. You have

*Delivered October 3, 1894.

also a Faculty to consider, who is closer to you than a parent. But I feel confident, when I look upon the bright, intellectual countenances about me, that the above advice is perforce unnecessary. What a grand thing it is to meet students with a purpose! I see it stamped on all your countenances. I see more; and I hear you utter, "Oh, gentle Faculty, by and through your aid we will win." It is written in letters of burning flame upon all your pennants. You ask, Is it fair that all should be demanded from the student and nothing from your instructors? No; your Faculty have grave responsibilities in directing you in the way you are to acquire the science of the healing art. They have been awake to this fact for a long time. The changes in the policy of the school, the selection of the best teachers in the various departments, the addition of new chairs, the selection of laymen of recognized and superior ability in their respective walks of life, all tend to make this college one of the most scientific and practical in the country. Your college has adopted a course which is out of the beaten track, ambitions outside of the old-fashioned type of college teaching. Your Faculty do not wish to be known as men who simply know their books; they will show you that here you will obtain not only safe and sound scientific education in medicine, but also eminently a practical one as well.

"The foundation of our art is knowledge of the material to be worked upon —the human body. Anatomy to its uttermost details, anatomy naked-eyed and minute, normal and abnormal, healthy and diseased, is the foundation of all good surgery." So said J. Greig Smith, and so says our Nestor of anatomy, Professor Pancoast.

Your teachers of anatomy will lead you on gradually and pleasantly through the structure of the human body, which you must know all about. How can you expect to become proficient except you know thoroughly the genesis of your profession? The great Titian was a master at mixing paints before he could produce the matchless gems which are still the admiration of the artistic world. Michael Angelo had to know how to temper his chisel before he aspired to produce that wonderful statue of Moses; Morse, the conductility of metals before he could send messages with lightning speed to the uttermost parts of the earth. Houston, in connection with his former colleague Thomson, had to produce a dynamo before they could let loose the Promethean spark that now illuminates this and hundreds of other cities the world over. In all the mechanical arts men must understand the foundation of their calling if they wish to succeed. Is it less to ask you to labor unceasingly to understand the frame-work, the chemical laboratory, the animated organism, the wonderful handiwork of God—man?

In the acquirement of your profession you will not so much, as time rolls on, be carried to greater heights, but to broader fields of knowledge; and, at last, when you have filled the cells of your brain with theory, then the practical side of your teaching will be given you—a knowledge so essential to your success in life. Many of you will elect to become general practitioners. Of what value to you is the knowledge imparted by your professor of anatomy, unless you can appreciate and follow the teaching of an Anders, or the application and technique of surgery as taught by Laplace and Ashton? "What hearing is to the physician, so is touch to the surgeon. It is the intellect which teaches both. So, when the opportunity arises, educate both ear and hand."

In this case we confidently hope to find many young men born to be masters of their art. To such I would say: Though work comes easy, work all the harder; make the talent given you increase and multiply. Though you may have genius, yet patience and hard work are necessary to make even genius fruitful. To those who have not been so well endowed much may, nevertheless, be accomplished by perseverance. Your Faculty will lend all of you an ever-helping hand. The fable of the victory of the tortoise over the hare should be fresh in your memories. As the masses, your future patients, become more highly educated it behooves you to aspire to a higher grade of intellectuality. We must to-day have physicians who are not only skilled in their profession but who have a mind sufficiently broad to cope with the living questions of the day. In no time of the world's history are the intelligence and judgment of physicians so largely sought after

and so highly esteemed in the important questions as how best to cope with epidemic diseases in densely-populated communities. If I may make a criticism, I must say that the preliminary education of the young men who are choosing the medical profession for their life work has not been as thorough as it should be. In this State it is now necessary to pass two boards of examiners before you can practice medicine. Is this fair under existing laws? I say, emphatically, no! The State puts on the restrictions, but does she in like manner give us a preventive? While our Commonwealth is doing much to foster education, she is far behind in giving aid to young men who eventually must look after the health of her people. The actual prevention of outbreaks of virulent diseases or of blindness is far cheaper than trying to eradicate such evils after they have become epidemic. But in the meantime where must this aid come from? Clearly, we must look to the men who in the abundance of their wealth can afford to build laboratories and found institutions where young men can get this preliminary schooling.

The older countries of Europe are far ahead of us in these matters; their medical chairs are richly endowed by the State, and their occupants do nothing but investigate, analyze, and transmit. If the public wish protection they must perforce lend us a helping purse. I must quote what one of our leading teachers in medicine says on this subject*: "In this country, for the most part, we cannot look to the State for endowment for medical education, but we must appeal to private beneficence. A few public-spirited and generous men and women have already given practical proof of their appreciation of these facts. With more general and fuller realization of these needs and present condition of medical education, and the results that can be secured by its liberal endowment, there is every reason to believe that these benefactions will be largely and rapidly increased, and that thereby the condition of medical education in this country shall cease to be a reproach to us."

How can we escape from this reproach? You young men who have not had a college education can now take advantage of your environments. You have arrived at an age when your mind becomes retentive and capable of becoming burnished by attrition. In this large city instructive lectures are given on a variety of intellectual subjects. The Franklin Institute throws her doors open to you all. The Academy of Natural Science in like manner extends a helping hand. The Young Men's Christian Association and our churches, whose pulpits, filled by the ablest clergy in the land, will also welcome you. Select such plays at our theatres as will rest your mind by way of diversion. Study not only the words but the grace and movement of the actors. Remember, it is not fair to yourselves to try to brighten your minds and let your bodies remain awkward and ungainly. Plato said, "That one must form not only a mind, and not only a body, but both a mind and a body, to become a man."

In practical medicine, as in many of the mechanical arts, we need not fear reproach. We have shown the world what we can do; but how much better it would be if our scientific knowledge were equal to our mechanical skill! Then we should have students flocking to America for their medical education, just as we are having students from all over the world flocking to our twin sister the Philadelphia Dental College, which leads the world to-day in practical dentistry. Handicapped, as we are, we are nevertheless progressing. Your college is heading toward that plane of efficiency which places her in the front rank of medical institutions. Many additions have been made to the corps of instructors. Two new chairs have been added, a chair of Physics, and it is with great pride that I revert to the fact that the gentleman who fills that chair is eminent in his department, and honored not only in this country, but throughout the whole scientific world. Gentlemen, it is a rare privilege that you will have the opportunity of listening to such a teacher as Prof. Edwin J. Houston. Another chair which has been added, and which will be of superlative value to you, is that of Electro-Therapeutics. In Professor Kennelly you have an instructor who is one of the leading masters in this new department of science.

And so I could continue to speak of the other teachers recently added to the college. With such additional advantages, you will continue to keep the olive and

*Prof. William H. Welch, M. D., Baltimore, Md.

the gold* ever bright, ever shining. There are other opportunities given you for advancing yourselves. You have a variety of fraternal associations; you will be asked to join quiz classes and societies. Join them, and become active workers. Let the "pride of ambition and the inspiration of generous emulation" help you to individual achievement. Let each week have its review. Not only drive the nail, but clinch it. By this means you will become adepts by asking and answering questions. If you fall below your classmates their success will be a means of stimulating you to better work. Some of the most pleasing recollections in after-life will be your class-day associations. As you go on from one semester to another your line of instruction will be in keeping with your progress. Your last two years will find you in the field of practical medicine. I mean by this that you will be given the opportunity of becoming thoroughly acquainted with disease at the bedside. You will learn the technique of surgery, gynæcology and obstetrics, and in the special departments, such as ophthalmology, otology and dermatology you will have opportunities unsurpassed. Our large clinics in the various departments warrant me in making this statement.

You are on the edge of a future which will, at the touch of your hand, show mighty developments. Let another Pancoast, Gross, Pasteur, or a Koch be found among your class. "Do what you can in your life; make what you can of your life; but, above all, love the highest and deepest and best that you can." As you stand on the shore of the great ocean before you, do not think that you have no other motive than to acquire sufficient knowledge to enable you to pass your examination and thus get a diploma. Medicine is not a complete science; many changes have taken place in the medical world during the last decade; many more will be unfolded in the next ten years. Look what changes have been produced by the discoveries of Pasteur and Koch! In many diseases the whole line of theory and treatment has been changed. Contrast the surgery of to-day with that of a few days ago! How little is known about contagion! The vast field of preventive medicine is almost entirely unexplored. I feel sure that the day is not far distant when such a chair will become the most important in medical colleges. You who are inspired, remember that many crowns of laurels await you. You may not acquire wealth in gaining these honors, but you may do more—you may confer blessings upon your fellow-man. "Who can estimate the money value of the discoveries of Louis Pasteur to humanity?" asks one of our ablest writers. In the opinion of Professor Huxley, these discoveries "have made good the war indemnity of five thousand million francs paid by France to Germany."

Personal habits have much to do in making or unmaking a professional career. Abstain from all unpleasant habits. See that your bodily health is as well looked after as your mental. Young men when they join college classes are sometimes led away by the idea that to chew tobacco, use profane language, and approach the slovenly are passports to manliness. Do not make this mistake. If education refines the mind, let your habits refine your body. Remember that, of all men, the medical practitioner should be, above all things, a perfect gentleman.

*College colors.

ADDRESS BY EDWIN J. HOUSTON, PH.D

Professor of Physics in the Medico-Chirurgical College, Philadelphia.

To-day the Medico-Chirurgical College enters upon another year of its existence. If its record in the year to come but equals that which it has made in the years that have passed, the result will be notable. The signs of the times predict increasing activity and progress, and I feel that I can congratulate you who have entered its halls in that you are thus enabled to avail yourselves of the increased activities and usefulness which the college now offers.

To the superficial observer a medical college represents, if I may say so, the mere machinery whereby a certain number of men are trained in the healing art, but to those who look below the surface it is far more than this. It represents an ultimate growth, the result of a succession of efforts put forth by society during many centuries for the conservation of its most valued possessions, namely, its health and happiness; nay, even more than this, for the conservation of its vitality and of its continued existence as a nation. The Egyptians of old handed over to their

priesthood for preservation their household gods, who they believed had charge of their lives. In our present more civilized society the medical profession represents the priesthood, ministering to the welfare of the race, and society thus places in your watchful care the things necessary to its continued existence—viz., its vitality.

Two legions of foes stand ever ready to oppose the progress of the human race. These are the enemies of the body corporate and those of the physical body. The former society can deal with only through the education of the masses; the latter are entrusted to your zeal and watchfulness. Such guard has been well maintained in the past, for foes that once decimated the human race are now held in check. Witness the value to mankind of vaccination for smallpox, or the Pasteur treatment for rabies. Note the marked success of the surgeon and the dependence of such success on aseptic operations.

The best work of the individual is possible only when he possesses a maximum health, and this is true also of nations. Healthy individuals, provided they have powerful brains, may realize great results, though, perchance, a powerful mind in a weak body may achieve notable results, yet it does so despite such weakness, and not by reason of it. He who possesses a powerful mind in a powerful body becomes a veritable giant among his fellow-men, and this is true also of nations. You, therefore, who will stand at guard over the health and vitality not only of the individual but of the nation have thereby imposed on you responsibilities which you may not treat lightly. It behooves you carefully to consider some of the requirements of your priesthood. These I will endeavor to give you from the standpoint of the layman, for because I am a layman I am, I believe, better fitted for clearly distinguishing the proper relative importance of such requirements.

I would, therefore, formulate these requirements as follows: viz.,

(1). An extended knowledge of the principles of your profession—that is, a thorough mastery of your college work. These studies must be mastered; not by such a knowledge as will just enable you to pass the ordeal of an examination, but that which comes from actual experience—knowledge which you must acquire through the teachings of your profession in the laboratory, at the Clinic, or at the bedside.

(2). A memory well stored not only with the knowledge just referred to, but enriched by individual experience in the actual application of the principles of your profession.

(3). Trained powers of observation, ever on the alert to group apparently disconnected symptoms into orderly sequence and thus successfully to deduce the unseen from the seen.

(4). An extended knowledge of the best accepted practice. Several sources of such knowledge are available, viz.: a.—The teachings of the able faculty of our college. b.—The clinic. c.—The dissecting room. d.—Periodical medical literature. e.—Medical societies. f.--The bedside of the patient.

So far I have touched only on the mental requisites for a well-equipped physician. Requisites, however, by no means stop here. In the holy calling you have elected there are certain moral requirements, the foremost among which I would place sympathy. I care not how high the mere mentality of the physician, nor how well he may be equipped in the requirements I have mentioned, if he lacks sympathy for his patient he lacks the one great requirement, the failure to possess which will place his labor on the low scale of mere machine work or automatism. It is the highest glory of man to increase the health and happiness of his fellow-man. The development of the mental activities alone tend to make the physician regard his patients merely in the light of cases, merely as opportunities for physiological experiments. Such in my judgment would not be the highest exercise of the healing art The patient should be regarded as more than a mere opportunity for testing the therapeutic value of drugs; for studying the course of a disease; or, as presenting cases for brilliant surgical operations; for, in no sense can a human body be regarded as a mere machine in the sense the term is ordinarily employed. It has taken nature many millions of years to evolve man, a mechanism plus the capability of sympathy, and he who would intelligently treat this marvelous mechanism must, perforce, take into account its highest development.

It is true that the diagnostician may

form as accurate a judgment of a case submitted to his care by regarding him as a mere piece of machinery in the ordinary sense, but in so doing he does an injustice to his patient and to himself, causing needless pain, since such attitude of mind cannot be concealed.

The inorganic world in which we live is hostile to this. Man, whether civilized or savage, is required to make a constant struggle for existence. The only compensation he has for this struggle is that health which it is your province to guard and restore, and that human sympathy and friendliness which afford amenity for all natural infirmities. To no body of men more than to you are such facilities offered for easing the labors of others, for rendering easier their pathway of life. For you are called into the inner chamber of the family, where only the dearest friends are ordinarily permitted to enter. Can there be any doubt that you will in the practice of your profession necessarily be called upon to exercise sympathy for the suffering? The highest phase of healing is that which regards the patient as a fellow-man, therefore I would place sympathy as one of the highest moral requirements, a trait which in fact so marked the work of the Divine Healer of Nazareth. Summing up the requirements of a physician as I understand them I should say that he should be a cultured, intelligent, sympathetic Christian gentleman.

THE THERAPEUTIC ACTION OF TRIONAL.

BY OTTO BAKOFEN.

Inaugural dissertation presented to the University of Freiburg.

Continued from last number.

It remains to be mentioned that Boettiger repeatedly made the same observation as Schultze, namely, that restless patients sleep well and remain quiet not only the night after its exhibition but also during the next and the following night. Among all his cases Boettiger found only two per cent. in which it proved inactive, while in nine per cent. the effect was weak. In his opinion, and we agree with him, this is an admirable result. The outcome of his investigations of trional is formulated by Boettiger in the conclusion, that the remedy possesses exquisite hypnotic and sedative effects, while unpleasant sequelae are extremely rare if he observe the proper limits of dosage. The hypnotic action is usually manifested very rapidly, frequently after 15 minutes; hence it is advantageous to administer the remedy just before retiring.

In cases of simple agrypnia a single dose of 1.0 gm. is often sufficient, and never more than 2.0 gm. is required to obtain a full effect. In cases of slight psychical excitement, disturbances of the mind of primary or secondary character, and in delirium, even of marked degree, trional is likewise a very useful hypnotic. In conditions of marked excitement a very satisfactory effect can often be obtained only by divided doses, such as 1.0 gm. several times daily.

The remedy proved refractory only in cases where the insomnia was produced by bodily pains, as well as in conditions of alcoholic dementia, and cases of extreme psychical excitement and motor restlessness. Boettiger regards 3.0 gm. as the largest single dose. Habituation after prolonged use of the drug does not seem to occur.

C. Raimondi and A. Mariottini (La Reforma Medica, 1892, No. 187) communicate their observations in the Therapeutic Clinic of the Polyclinic at Siena.

Trional is a crystalline powder consisting of shining tablets, which is readily soluble in hot water, wine, alcohol and hot milk. It may also be administered in suspension in mucilaginous fluids. All the solutions have a somewhat bitter taste, and for this reason the remedy was given some time after the evening meal in sweetened gruels. The single doses amounted to from 1.0 to 3.0 gm.

The remedy was employed in 19 cases of ordinary insomnia, as well as in 8 cases of mental disease. In 10 cases of the first category doses of 1.0 to 1.5 grammes produced sleep of 6 to 8 hours' duration, and in the remaining 9 cases the administration of 2.0 to 2.5 grammes was followed by sleep lasting from 7 to 9 hours. In only 2 of these the sleep was variously interrupted; in the others it was almost continuous. The sleep was refreshing and unattended by disturbances of the pulse and respiration, and had no appreciable effect upon the metabolism. In a few cases secondary disturbances occurred, but of slight significance.

The hypnotic effect in patients suffering from mental disease was as satisfactory as in ordinary patients, except that after daily administration of the remedy for a long time secondary disturbances were observed somewhat more frequently. In contrast to the observations of others, they remarked that these after-effects were somewhat more numerous than with sulfonal. The cases reported by them, however, show that trional is several times more effective than sulfonal.

Brie (Neurolog. Centralblatt, 1892, No. 26) presents the following report regarding trional, from the Provincial Insane Asylum at Bonn. From the middle of

August to the middle of November, among 42 patients, about 600 grammes trional were employed, divided in 360 doses of 1.0 to 3.0 grammes each.

In the milder cases the initial doses amounted to 1.0 grammes, in the more severe to 2.0 grammes. The remedy was admimistered one-half hour before retiring, dissolved in hot water, to which cold water was then added. It was well tolerated.

Brie now communicates his observations in the different forms of disease. In 11 cases of melancholia and hypochrondriasis good results were always obtained from doses of 1.0 to 2.0 grammes trional. Sleep ensued promptly after one-half hour, and lasted from 7 to 9 hours, the patients waking refreshed on the following day without any after-effects.

In 4 cases of melancholia with agitation, Brie observed excellent results after 2.0 to 3.0 grammes, in one case even after 1.0 gramme. In 2 cases after the remedy had been administered on six occasions, it could be entirely dispensed with. In 10 cases of maniacal excitement, including paralytic mania, noteworthy results were secured by trional. In these conditions doses of 2.0 grammes, and more often, 3.0 grammes, were necessary. The patients slept at least for 6 hours.

Brie noted but few after-effects after these comparatively large doses. In a weakly patient vomiting occurred several times after the administration of 3.0 grammes. A young female patient, who had frequently taken 2.0 grammes without disturbance, complained on one occasion of nausea. Vertigo, ataxia, etc., which are frequently observed with sulfonal, never occurred.

Trional always produced satisfactory sleep in 8 cases of hallucinatory dementia and paranoia. In the last group of cases, comprising secondary mental disturbance, dementia, senilis, chronic organic diseases of the brain and paresis, the remedy was administered chiefly to patients who had been restless and noisy for several nights. In most of the cases after 2.0 grammes, rest was secured during the next and following night, while the others slept the greater part of the night.

In the case of a healthy person who was unable to sleep on account of the severe pains produced by a panaratium Brie employed 2.0 gm. trional with success. In a few surgical cases it failed to relieve the pains resulting from operations.

Aside from the few after-effects above mentioned no others were noted, and addiction to the drug never occurred. Brie regards 3.0 gm. as a maximum dose. With regard to the efficacy of trional and sulfonal he found that the latter acted less promptly, while its effect was more protracted and often cumulative. He further found that trional acted as efficiently as chloral, paraldehyde and sulfonal.

Brie concludes his observations, which were extremely favorable, as follows: "Trional is to be regarded and recommended as a hypnotic of high rank. I am inclined to think that it will take the place of sulfonal in cases where a protracted effect is not desired. It will frequently be preferred to all other hypnotics, because it is nearly tasteless, is readily taken and exhibits after-effects very rarely, and then in a slight degree. It is indicated in simple agrypnia, as well as in the insomnia attended with restlessness and even marked excitement of persons suffering from psychical maladies."

Beyer (Archiv. f. Psychyatric, Bd. xxv, Heft 2) reports his experiments with trional from the Psychiatric Clinic of Strassburg. It was administered in doses of 0.5 to 4.0 gm., usually in a single dose before retiring, rarely in fractional doses.

The full effect of the remedy was usually obtained in the course of half an hour. If given in sufficient dose it almost always produced a feeling of languor, which was rapidly succeeded by a quiet, dreamless, refreshing sleep. The duration of the sleep appeared to some extent dependent upon the size of the dose. Bodily pains, noises and even light sometimes interfered with the effect. Sequelæ or unpleasant and injurious symptoms never occurred under use of proper doses. The latter did not appear after prolonged employment of the remedy, but only after excessive doses. No habituation to the remedy occurred. Among the after-effects Brie observed, in one instance, sleepiness and fatigue on the following morning, while ordinarily after awaking the patients felt refreshed. On several occasions excessive sleepiness with swaying and staggering similar to cerebral ataxia was noted. In two cases in which trional was given for several days in fractional doses Beyer observed real symptoms of poisoning, marked malaise, cyanosis, vomiting and gastric disturbances. Inasmuch as he observed two milder cases of this kind after the same method of dosage, he believes that disagreeable sequelæ are more readily produced by divided doses than by a single large dose. Furthermore, he calls attention to the fact that there is a difference as regards sex in the dosage, male patients on an average requiring from 0.5 to 1.0 gm. more than females.

The constitution and bodily weight should also be considered in the dosage. Thus, for example, in a girl weighing 20 kilogr., who suffered from kiphoscoliosis, "the well-known temulence," was observed after the small dose of 0.5 gm. The dose should also be regulated in accordance with the nature of the insomnia or psychosis. At times of violent excitement a patient may require 2.0 to 3.0 gm. to obtain a full effect, and this dose may be well tolerated, while during a period of quiescence the administration of equal quantities may provoke marked disturbances.

Beyer strongly urges that the dosage should be carefully regulated with reference to the sex, constitution, weight, age, nature of the disease and temporary symptoms.

In simple insomnia and neurasthenia, as well as in melancholia simplex, he derived admirable results from 1.0 to 1.5 gm. (1.0 gm. in females. In mania equally good effects were obtained from 3.0 and 2.0 gm. respectively. He also states that Trional has a remarkably favorable influence over hallucinations, in acute as well as chronic paranoia, even in old cases. In delirium tremens the effect was well marked if the dose was accurately estimated.

On the ground of all these observations Beyer considers himself justified in recommending trional as an an excellent hypnotic; the more so since injurious after-effects can readily be avoided by correct dosage and individualization.

From the Psychiatric Clinic of Prof. Jolly in the Royal Charite, in Berlin, Hammerschlag (Dissertation, Berlin, 1893), reports a series of experiments with trional. During the period from December to March 614 gm. were administered in 395 single doses to 60 patients. The doses varied from 1.0 to 3.0 gm. The remedy was given about half an hour before retiring, dissolved in warm water or warm milk. Hammerschlag also noted that in general it was well tolerated by the patients. Sleep ensued quite promptly, and was deep and dreamless, the patients awakening as from a normal sleep.

From the tables which this author has arranged according to the different diseases it appeared that the full effect—that is, sleep from 6 to 9 hours' duration, always took place in the cases of melacholia, mania, hypocondriasis and hysterical dementia. In paranoia 91 per cent. of all the doses were completely effective; in epileptic dementia, 85 per cent., and in dementia paralytica 83 per cent. proved effective.

The observations made by him in conditions of alcholic excitement are worthy of note. While Barth and Rumpel, as well as Boettiger, obtained no successful results from trional in these cases, Hammerschlag, conformably with the observations of Beyer, noted a favorable action in 66 per cent. of the cases. He also agrees with Boettiger with regard to the good effect of trional in morphio-cocaine psychoses, and in 88 per cent. of the cases observed a satisfactory result.

The table further shows that better results are derived from trional on an average than from chloral, sulfonal and morphine. The sleep following trional usually lasted for a longer time and was more restful than that produced by other remedies. Even in healthy persons who suffered from nervous sleeplessness trional, 1.0 gm., secured good sleep.

Finally, it must be mentioned that Hammerschlag also failed to note disagreeable after-effects, with the exception of a few trivial disturbances confined to the digestive tract. During prolonged administration nothing occurred to demand an interruption.

To be continued.

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LIFE INSURANCE FOR WOMEN.

It is only recently that any of the life insurance companies have been willing to take risks upon the lives of women with no more restrictions than are required from men. They were formerly called "moral risks," it being believed that many men would have their wives' lives insured for the sole purpose of killing them and collecting the insurance money. Such cases are said to have been not at all uncommon some years ago and even now they occasionally occur. The prejudice against female risks is, however, fast wearing away, the companies have become more liberal in issuing them, and some of them are actually soliciting women to insure their lives. A well-known insurance man said: "The problem of insuring lives of women has been a very serious and perplexing one, and my opinion based on my own experience, is that we would be bet-

ter off to-day if we had never taken any female risks."

One of the chief obstacles to insuring women at the present time is their unwillingness to submit to the regular medical examination which is required of men. They cannot be depended upon to give truthful answers to the questions of the medical officers, and this is said to be the main reason at present why more women are not insured. Besides this, the fear that a brutal husband will murder his wife for the insurance, or worry her to death is still more or less believed in. A Philadelphia company was the first to take women at the same rates as men and to engage female examiners.

Women are rarely insured for more than $10,000, but there are some female risks even for larger sums than this that are looked upon as desirable. These are upon the lives of women who have large life interests in estates which terminate at their death. There is no reason why a woman of this kind should not provide for her husband and family, and many are doing so. One woman of this class was recently insured by a first-class company for $100,000 in favor of her children.

THE THIRD BLOOD-CORPUSCLE IN TUBERCULOSIS.

The third blood-corpuscle, as defined in Landois and Sterling's physiology, is now considered by some to be a pathological product.

At the meeting of the Pan-American Medical Congress last year Dr. Watkins, of New York, stated that it was his belief that the third blood-corpuscle should be considered a food of the tubercle bacillus. Recently he has come out in the New York Medical Record with the assertion, based on investigatations, that the third blood-corpuscle is the earliest manifestation of tuberculosis, and that without its presence it is impossible for tubercle bacilli to develop even if taken into the system.

If these views are correct much new light is shed on the pathology of tuberculosis, which clears up considerable etiological darkness. It has never been sufficiently demonstrated why the tubercle bacillus, which must be received into the systems of many persons who do not subsequently develop tuberculosis, should not treat all persons alike. If it is requisite to possess a third blood-corpuscle, in order to enjoy tuberculosis, let us by all means study the best possible methods of eliminating such an agent from human blood. We cannot see as yet that there is much advantage to be gained by this theory. Are we to understand that this third blood-corpuscle is the ovum and the bacillus the germinating agent of tuberculosis? And are these agents harmless so long as they remain apart?

If this blood corpuscle then be pathological its absence from the blood would imply immunity from at least tuberculosis, and the question would naturally arise as to whether it is the forerunner of other diseases?

It is not well to draw hasty conclusions from such meager reports as are at present at hand. While theoretically there is much to be solved by the presence of a new pathological factor, practically we are in as much darkness as ever regarding the therapeutic benefit of the new discovery, if such it be. The discovery of the tubercle bacillus was received with deserved enthusiasm, but it has not as yet demonstrated that we can cure tuberculosus with any greater precision than was manifested in the days before tubercle bacilli were recognized as pathological factors.

MANAGEMENT OF THE INTESTINE AFTER ABDOMINAL SECTION.

In a very practical article in the New York Journal of Gynecology, Skene Keith and George E. Keith lay down the following general rules:

(a). When the general condition of the patient is fairly good and the abdomen is not distending, and when there is not much colic, let things take their natural course. This advice holds for the great majority of cases.

(b). When the abdomen is distending without a previous state of peristaltic action shown by much colic, and when there is a tendency to vomiting, give a mixture of magnesia until the bowels move.

(c). Treat distention without colic or vomiting by quinine injections.

(d). Quiet excessive peristaltic action by small doses of morphine given hypodermically.

(e). For distention following excessive peristalsis give a small dose of morphine followed in a few hours by castor oil or magnesia.

(f). When there is septicemia, wash out the abdomen as soon as the condition is evident and treat as above.

(g). Do not get into the habit of calling septicemia shock, exhaustion or any such term. Be content to believe that some mistake has been made in the antiseptic precautions and that additional care must be taken in future.

Therapeutics.

Under the charge of LOUIS LEWIS, M. R. C. S., Philadelphia.

THE AMERICAN DISEASE.

It is a remarkable fact that many of the most valuable discoveries in materia medica have been made by laymen, and not until after a lapse of years adopted by the scientific world. The marvelous stories told by travelers of the uses to which the leaf of the Erythroxylon Coca was put by the South American Indians were received cum grano salis by the general reader and met with ridicule from the medical world, and not until recently was attention really fastened upon the "miraculous leaf," as it was called by early writers.

The fact that the Indian traveled for days carrying heavy burdens without food, being sustained by the leaf only, demonstrated its powers in sustaining vital energy and restraining tissue metamorphosis. This suggested its use in Phthisis and all forms of anemia, in debility following fevers and after surgical operations. Coca has now taken its place as a reliable remedy in many conditions, such as sleeplessness, despondency and as a general heart tonic and invigorator. Its property of strengthening the voice, due to its being a tensor of the vocal cord, makes it very useful for the singer and public speaker, and it is a reliable aphrodisac without being irritating.

Ordinary Coca wines have some value in promoting digestion, due to their stimulating properties, but many of the wines on the market are improperly prepared or have too high a percentage of alcohol, which impairs the true therapeutic properties of the Coca. Among the later preparations one known as "Maltine with Coca wine" has attracted our attention. The well-established reputation of maltine as a food and digestive agent and as a vehicle was a guarantee that the combination of maltine with a carefully made Coca wine prepared from fresh leaves and containing a small percentage of alcohol would prove a valuable acquisition to our list of elegant pharmaceuticals. When it is known that each ounce of maltine with Coca wine contains enough diastase to digest thirty ounces of starch at the bodily temperature, and all the active principles of 30 grains of assayed Huanaco Coca leaves, its value will be readily admitted.

"The American Disease," an irritable heart combined with indigestion and nervousness, so common among our business men and almost universal among women of the upper classes, presents a problem of ever-varying embarrassment to the clinician. Alcoholics may mitigate the symptoms of this condition temporarily, but lead to disastrous results. To try to give relief with opiates is little less than homicidal. Maltine with Coca wine is an ideal combination in these cases, not only on account of the Coca but from the food and diastasic values of the maltine, and is not followed by habit symptoms, for when the condition is relieved the remedy is no longer needed and its withdrawal is not followd by depression. In this particular Coca differs from all other stimulants and narcotics.

A well-known writer happily characterizes the dual action of maltine with Coca Wine in the following graphic manner: "The Coca boosts the patient and the maltine furnishes the peg that prevents him from slipping back." Other tonics afford only temporary stimulation with nothing to prevent the subsequent reaction.

—The National Medical Review, Oct. '94.

Destroying Poison Vines.—Any plant, poisonous or otherwise, can be easily destroyed by being cut off just beneath the ground after the young leaves have pushed and before they are thoroughly mature.—Meehans' Monthly.

In a new process for coloring leather by electrical action the hide is stretched upon a metallic table and covered, except at the edges, with the coloring liquid. A difference of potential is established between the liquid and the metallic table. The effect of the electric current is to cause the pores of the skin to open, whereby the coloring is enabled to penetrate deeply into its tissue.—Popular Science Monthly.

"Doctor, I am troubled with shooting pains in my face." "Yes, madame. You use too much powder."—Chicago Tribune.

The physician in charge of the Woman's Hospital in Soo Chow, China, is an American woman.

Medicine.

Under the charge of E. W. Bing, M. D., Chester, Pa.

INTRA VENOUS INJECTIONS OF CORROSIVE SUBLIMATE.

The success of intra venous injections of quinine in grave forms of malaria induced Bacelli to try the same plan in cases of syphilis, using corrosive sublimate.

Two cases of cerebral syphilis, which had resisted ordinary specific treatment, were treated in this way with excellent results. The method is as follows:

The skin is first rendered aseptic, and a ligature is placed around the arm, and one of the veins at the bend of the elbow is selected, in which the following injection is made:

	grains
R. Bichloride Mercury	1
Chlor Sodium	3
Dist. Water 1000	

The hypodermic syringe is filled with the solution, the needle carefully inserted, and the injection made slowly. The patient in a few seconds notices a salty, then metallic taste in the mouth, and in five or six minutes an increased flow of saliva.

The commencing dose is a cubic centimetre of the 1-1000 solution each day (1 milligramme).

This may be increased to 2, 4, and even 8 millegramme, which is the maximum dose. The advantages claimed are:

1. Small quantity of drug.
2. Rapid action on the symptoms, which show the syphilitic condition of the blood.
3. Quick and direct action on the walls of the vessels, one of the chosen seats of specific lesions.

—Annales de Med.

SERUM TREATMENT IN DIPHTHERIA.

Roux's connection to the Buda Pesth congress is the event of the day in a medical sense.

The antitoxic serum is obtained by immunizing animals by injections of the diphtheria toxine, combined with iodine. The horse has proved to be the best medium, being easy to immunize and furnishing large quantities from anti-diphtheritic serum.

The serum keeps well, and for transportation may be evaporated in vacuo, and when wanted for use may be dissolved in water.

The first experiments were made on animals, and were successful; and on the 4th of February, 1894, it was first used in the treatment of children suffering from diphtheria. From this date to the 1st of July, 1894, 448 children were treated with the serum. One hundred and nine of these died, an average of 24.5 per cent., as against an average of 51.7 in former years. All conditions equal, the difference proves the advantage of the treatment.

The activity of the serum ranged between 50,000 and 100,000—that is, a guinea pig, which, receiving 1-50,000 of its weight, supported 12 hours afterwards a dose of toxine capable of killing in less than 30 hours. Those who only received 1-100,000 of their weight survived from six to 15 days. A cubic centimetre of toxine mixed with from 1-30 to 1-10 of c. centimetre of serum was rendered harmless, and injected into the tissue it did not produce edema.

On entering the hospital all children receive systematically an injection of 20 cc. of serum under the skin of the flanks. If bacterological examination did not show diphtheria to be present the injection was not renewed. 128 patients suffering with various forms of sore throat were treated in this way without any inconvenience, but with amelioration symptoms and without contracting diphtheria, although exposed to its influence. When the injection is made properly there is no pain, and in a few moments it is absorbed. In most cases there is no local reaction if antiseptic precautions are used. In the diphtheria cases a second injection was made 24 hours later, and this was usually sufficient to bring about the cure. About 1-1000 of the weight of the child was the quantity of serum employed.

Consecutive accidents were rare, sometimes a intrenical eruption showed itself and occasionally paralysis of various parts lasting for a short time.

—Annales de Med.

DANGERS OF ATHLETIC EXERCISES WHILE CONVALESCING FROM INFECTIOUS DISEASES.

(Petite.)

Physical exercise may have a very bad effect during convalescence from infectious disease, by favoring the development of cardiac affections. Those affections which involve more or less the heart, during their course, leave in that organ alterations which may be recovered from, but which often leave serious lesions, such as fatty degeneration, during the time necessary to the "rextitutio ad integrum." Plenty of rest is required instead of—as is often prescribed for the sake of improving the appetite and strength—physical exercises.

Frequently a few weeks will establish an organic cardiac affection under these conditions.

The circulatory apparatus should be carefully watched after an attack of fever of any kind, and indulgence in athletics restricted.

—Le Courier Med.

SOME REMEDIES FOR MIGRAINE.

If Anemia—Iron quinine baths.
If Rheumatism—Alkalis.
If Herpchi—Arsenic.

Paullima (Guarana).

R		grams.
	Citrate caffeine	.1
	Phenacetine	.2
	Sugar	.1

10 tablets—1 every 2 hours.

Or Salicylate Soda.
Or Antipyrine.
Or Common Salt.
Or Laudanum of Sydenham.
Or Hydrotromate of Quinine.
Or Aromatic.

Combined with external applications of any and all kinds.

Combinations of the three bromides of potassia, ammonia and soda are frequently useful.

—Vaucaire Annales de Med.

THROMBOSIS AND EMBOLISM.

When a blood vessel is obliterated by a blood clot, we have the condition known as thrombosis, and the clot itself is the thrombosis. It may occur in any vein in the body, or in the arteries, especially those of the brain, resulting here in cerebral softening. The thrombosis of autochthonous. Embolus, on the contrary, occurs when a foreign body, portion of a valve, anhydrated air bubble, germs, or portion of a clot, is carried by the blood current and deposited in some one of the smaller vessels of the body, blocking it from the rest of the circulation, causing gangrene, in———, etc., Septic emboli are a means of diffusion of infectious diseases, as in the dissemination of cancer which, although generally spreading by the lymphatics may and does become generalized by means of the blood current.

—Annales de Med.

THE "SLEEPING SICKNESS OF WEST AFRICA."

This curious disease occurs oftener in males between 12 and 20 years of age, although all ages and both sexes may be affected with it. Enlargement of the cervical glands is seen at the onset: drowsiness and actual sleep at unusual hours are followed by profound and lethargic slumber lasting weeks or months. At first, active purgation arouses the patient, but later he succumbs to the lethal slumber and refuses all food; emaciation with increasing atrophy, exhaustion and starvation causes death at the end of from three to twelve months. When moribund, the coma ceases for a short time and the mental faculties are clear immediately before death. The most frequent and virulent cases occur in the valley of the Congo; others from the Congo to Senegal, in the Sierra Leone district, and in the Hinterland. Slaves taken from the Congo or Sierra Leone districts suffer from the disease when in the West Indies, etc. The prognosis is bad. Guerin reports 148 cases, all fatal. Gore says that 80 per cent. are fatal. Forbes reports eleven fatal cases, also two which passed out of observation. At autopsy hyperemia of the arachnoid and slight chronic pachy and lepto-meningitis are found; the cerebral substance is pale, indicating anemia of cortical centres. In one case splenic enlargement occurred; in two cases filaria sanguinis hominis were found, probably coincidences. The cause is unknown.

Theories are: (1) septic condition of the blood, as suggested by the arrest of development of active glandular elements; (2) presence of filaria, as advocated by Manson; (3) a neurosis affecting the neurotrophic system, Forbes' suggestion. Treatment has proved useless.

—Boston Medical and Surgical Journal.

Electro-Therapeutics.

Under the Charge of S. H. MONELL, M. D., 44 West 46th St., New York.

AN ELECTRICAL EXHIBIT.

The American Electro-Therapeutic Association held its fourth annual meeting in New York City, September 25, 26 and 27. An exceedingly comprehensive programme had been prepared, and other interesting papers were offered still later. An abstract report of the meeting will begin in our electro-therapeutic department of this issue, and be continued till complete. An important feature of the occasion was the elaborate exhibit of improved apparatus made in a special room adjoining the meeting.

Nearly every new device was displayed by the various makers. Among the great variety may be noted new milliamperemeters, exhibited by both the Mackintosh and Kidder companies; the "smallest battery in the world," by the Nassau Electrical Company; a magnificent new static machine, with mahogany case and mirror back, by the Galvano Faradic Manufacturing Company. Messrs Waite and Bartlett exhibited a new universal static electrode and stand electrode holder.

New electrodes of various kinds and material were shown by many makers. Messrs. Queen & Co. made an interesting display. The Edison Mfg. Co. had a very large exhibit, including the "Kennelly Combination Galvanic and Faradic Adaptor," for use on 110 or 120 volt continuous current circuits. The immense rheostat which controls and graduates the current within the finest limits is one of the most remarkable triumphs of workmanship ever put into a medical apparatus,and could not have been applied to such a purpose had not the makers already possessed the elaborate machinery required to construct the phonograph and other miracles of inventive genius. The Kennelly Therapeutic Alternator was also shown by this company. This is the only apparatus in the market in this country which produces sinusoidal alternating currents for therapeutic use.

The Jerome KidderManufacturing Company included in their extensive exhibit a set of bulb electrodes, made by a deposit of pure copper upon a vulcanite hollow form suggested by Dr. Phelps. Also the bipolar electrode holder and the Monell faradic battery. This battery contains various new improvements.

Dr. Kellogg, in a private exhibit, had on view his own senusoidal magneto-electric apparatus as well as a French apparatus for producing rapidly-alternating currents in connection with a static machine. This static transformer was purchased at the Chicago Fair.

The advances to be made in electro-therapeutics require the practical co-operation of both physicians and manufacturers, and that the latter are keenly interested in promoting progress was clearly proved by the liberal enterprise shown at this meeting.

THE NATIONAL SOCIETY OF ELECTRO-THERAPEUTICS.

Report of second annual meeting continued.

A very practical paper upon the proper selection of electrical apparatus was presented by a well-known authority. This was followed by one of the most interesting papers read at the meeting "Cicatrix of the Cervix Uteri. Treated by the Negative Pole of the Galvanic Battery," by Alice B. Condict, M. D.

She referred to a number of years' experience with her method of curing stenosis and lacerations, both in India and in this country, and cited cases in which she obtained a perfectly normal cervix. In discussing the subject Dr. Gunning substantiated Dr. Condict's remarks, and stated that the method could be relied upon with confidence.

The next paper on "Diphtheritic Paralysis Treated by Electricity," was read by Dr. W. L. Jackson, of Boston. He described in detail the case of a girl aged 15, whose condition was one of very general functional paralysis. She was treated with static electricity. Negative insulation with positive spark and breeze was administered for twenty minutes, three times a week. In two weeks she could walk, and then spinal

applications of galvanism were added to the previous treatment.

In the course of two months she became able to dance; could talk without nasal sounds and felt in fair, general health, but as yet had not recovered normal knee jerk, which had been entirely lost. In six months, however, she entirely recovered. Her menses had formerly been too profuse and painful. This was regulated by her treatment. She was in the habit of stating that she always felt buoyant after treatment, and as if she could endure a great deal of exercise without fatigue. She was cautioned, however, not to indulge this feeling. The writer's conclusions were that, although cases recovered without electricity, yet this agent was a reliable and useful means of hastening recovery.

"Brief Researches on the Action of Galvanic Foradic and Franklinic Currents on Nervous Tissue," was the title of an able and very scientic paper by W. Y. Cowl, M. D., of Berlin, Germany, read at the meeting by Dr. O'Connor, of New York. A careful account of various experiments, toegther with a description of the apparatus employed, and the precautions taken to eliminate error, was written in interesting form.

"Electrical Massage in the Treatment of Diseases of the Ear," enabled Thomas L. Shearer, M. B., C. M., of Baltimore, to narrate his experience with various forms of mechanical vibration, and especially with the instrument called the violin vibraphone. He cautioned against its use in acute inflammatory conditions, pointed out its inefficiency in cases of hardened cerumen and showed that in a certain class of chronic cases it sometimes did good and sometimes did not, Dr. Norton also stated that he was unable, after two years' experience, to as yet determine the exact value of these methods of treatment. Vibration was useful in perhaps one half of the cases to which it was apparently suited. In hypertrophic catarrhal conditions of the eustachian tube he had found benefit from masage treatment.

In discussing "The Galvanic Current of High Amperage in the Diseases of the Liver," Dr. L. J. Kohnstamm attracted special attention to the method he described and the results claimed for it. He also asserted that he was in the habit of measuring the dose of the interrupted galvanic current with the ordinary milliampere meter. He employed a current strength of from 15 or 20 to 40 ma., and restricted its action to a galvano-chemical action exclusively, as electrolysis was particularly to be avoided. An inquiry was made as to how the speaker got his meter to record the C. S. of the interrupted current, and elicited the reply that the interruptions (660 per minute) employed were so rapid that the needle was not affected. After the presentation of several other papers, the election of officers for the ensuing year, and voting to hold the next meeting in Boston, the session came to an end.

THE AMERICAN ELECTRO-THERAPEUTIC ASSOCIATION.

The fourth annual meeting of this society was formally opened at 10 o'clock A. M., September 25, at the Academy of Medicine, New York city, with 16 Fellows in attendance. After the disposal of routine business and the election of new members the following amendment to the constitution was made by unanimous vote: "Every candidate for admission to the association shall be required to present a paper to the Executive Council at least one month before the annual meeting." This is designed to raise the standard of membership. The society was then addressed by the president upon "The Function of the American Electro-Therapeutic Association." He referred to the remarkable awakening of interest in electro-therapeutics during the past few years, and regarded the organization and development of this society not as the cause, but as the necessary and natural result of this awakening. The association was now firmly established upon a sound basis. He deemed its functions were as follows: First, To secure improvement in electrical nomenclature and terminology, for electrical science should have a cosmopolitan language understood by all. Second, It should afford opportunity for workers in technology to meet and compare results. Third, The establishment of a uniform standard of electrical measurement.

Fourth, The introduction of instruction in electro-therapeutics into the regular curriculum of all medical colleges.

In reporting the work of the association all unsound views and doubtful statements should especially be excluded

from publication in the transactions. (If this could be done with all the electro-medical literature now extant it would clarify the subject immensely). Many, he said, attend the annual meetings of the association, to learn what is new, and to improve their armamentarium. Hence it was deemed advisable not only to make permanent the various committees upon standard forms of apparatus, but to enlarge their scope, and extend their usefulness. They would, hereafter, be required to test the workings of all new apparatus, collate information, and furnish an epitome of the year's progress in every branch of electro-therapeutics. "Standards" were to be limited to principles and not applied to machines.

In these remarks of the president a creditable broadening of ideas was apparent.

Reports of various committees was next in order.

In rising to make his report upon "standard coils," the chairman of the committee expressed his regret that the enlarged functions of the committees had not been sooner understood.

The reports prepared for this meeting upon the old basis would have been much more satisfactory had the new idea been earlier developed, and future reports would represent greater progress in the desired direction. He then stated that the induction coil was one of the most mysterious playthings of the electrical engineer, and owing to the diversity of methods and conditions of manufacture no unanimity as to a standard coil was possible. Each authority would adhere to his own views, and as yet no common ground of agreement had been reached. Among the four members of his committee there were four irreconcilable opinions. He would, therefore, not be able to present a committee report, but would simply give his own view of the matter.

He considered that the physician wanted a coil to do two things, i. e., excite muscular contractions, and effect nerve sedation. The simplest coil that would erred in the direction of over-refinement. He would advise that a Faradic apparado these was the best. Complicated coils tus have but one secondary coil, of 500 metres of No. 32 wire.

The second member of the committee objected to the chairman's view, regarded his advice as to a step backward to primitive methods, and argued that the chairman's conclusions were based upon the limited experience of the Neurologist, while he spoke from the standpoint of the Gynecologist, to whom a choice and variety of coils was an absolute necessity. In his opinion a one-coil apparatus could only be suitable for one man (i. e., a specialist in one line of work). Combination coils were needed to supply all the requirements of the general practitioner, and in this view the experience of the past year had more than ever confirmed him.

Dr. Massey favored compound coils.

Dr. Dunn referred to the desirability of having standard lengths of wire in coils.

Mr. Brown stated that it was the number of turns or windings of the wire, and not merely length that determined the effect.

Dr. Smith believed that two coils at least were required. Patients could readily tell the difference in sensation and effect with their eyes blindfolded.

Mr. Kennelly agreed with the chairman, and believed that doctors should confine their researches to finding out what current they want, and he would vouch for the ability of dealers to furnish any and every form of current the medical profession desired.

The chairman of the committee closed the discussion by stating that he held to his original opinion. Nothing new had been brought out by the other speakers, and as makers of coils furnished a great variety, every man could choose for himself.

(To be continued).

ELECTRICITY IN INCONTINENCE OF URINE.

Pousson, in the Journal de Medecine de Bordeaux, states that the induced current should be used in this affection. A slender bougie, containing a metallic conductor, which terminates in an olive-shaped tip, is introduced to the sphincter and a feeble current is passed for several minutes. The application should be made daily. Seven cases which had resisted all the usual medicaments were rapidly cured. There was a little girl among the number.

Miscellany.

PREMEDITATED SUICIDE.

I ask a glass of water, or of claret, or
of beer;
I go to kiss a pretty maid—she turns
away with fear;
I eat some lemon jelly that's been stand-
ing on the sill;
And they tell me all are loaded—war-
ranted to kill.

I put a pencil to my lips; I gulp down
pounds of air;
I visit all the cattle at the Wayback
County Fair;
I buy a paper of a boy, and handle dol-
lar bills;
And they tell me every one of these has
that on it which kills.

I'm not much up in science, but I know
a thing or two;
I know that if I do not eat or drink or
kiss a few
Of these fashionable, dreadful germs, I
certainly will die,
For I'd have to give up breathing to es-
cape the bacilli.

Bacteria, Bacteria! I'm not afraid of
you!
The world will roll around the sun for
all that you can do.
So on dollars and on papers and on
kisses and on food,
Just hand me common bacilli—I'm not
a science dude.

And what's the use of living if you can-
not eat or drink,
If pretty girls and dollar bills, and even
printer's ink,
And country fairs and pencils are only
other terms
For the rapid transit system of the
scientific germs.

JUDGE.

LABORATORY DOCTORS.

Laboratory doctors, with troops of dogs, guinea-pigs and rabbits, and numerous cultures of bacteria, are busily at work solving the vexed problems of diseases and teaching their benighted brethren those facts which, as Josh Billings says, "ain't so."

The energies of the active practitioner are occupied in relieving the sick and suffering around him, and recording the facts learned through careful clinical observation and experience.

The laboratory doctor is exposed to many dangers. The pernicious habit of generalizing from a few experiments or an isolated occurrence is almost sure to seize him; the light of the laboratory lamp has something fatal about it, changing impassioned prejudices into rational convictions; beautiful theories, promising a scientific and accurate solution of troublous questions, beset him until he forgets, in admiration of the edifice, that any inaccuracy in the foundation is liable to precipitate into the dust the most imposing superstructure ever reared.

These and a thousand like perils crowd the path of the laboratory doctor from which his brother, the active practitioner, is comparatively free—free because the ideas, inspirations, theories which constantly appeal to the brain of every intelligent physician, are daily subjected to clinical test, a very satisfactory break for headlong ambition.

The medical profession must make a stand, and refuse to accept without remonstrance or dispute the teachings of laboratory physicians, unless they are content to accept the philosophy of the ostrich, and by closing their eyes deny the existence of the interrogation marks which so plentifully intersperse these brilliant theories.—Medical Brief.

The new flash light which the Government will erect at Fire Island consists of a bivalve lens about eight feet in diameter, to be illuminated by two arc burners of several thousand candle power each, so magnified by the lens as to give a flash whose power is estimated at 250,000,000 candles. "This light will have the most powerful lens ever constructed, and, in favorable weather its rays projected, against the sky, will be seen at a distance of at least 100 miles, while the light itself, which will flash every five seconds, will be visible 24 miles."

—Hardware.